

**THE APPLICATION OF WASHITA OIL & GAS L.L.C. FOR PERMANENT FIELD RULES FOR THE DARROUZETT (MORROW LOWER) FIELD, LIPSCOMB COUNTY, TEXAS**

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**Heard by:** Margaret Allen, Technical Hearings Examiner

**Procedural history**

Application received: July 7, 2005

Hearing held: August 9, 2006

**Appearances**

Ana Maria Marsland-Griffith  
William C. Towner

Representing  
Washita Oil & Gas L.L.C.

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Washita Oil & Gas, L.L.C. ("Washita") is proposing the following permanent rules for the Darrouzett (Morrow Lower) Field:

1. 1320'-2640' well spacing; and
2. 640 acre gas proration units with 10% tolerance.

The examiner recommended a designated interval and an allocation formula be adopted. Washita suggested the correlative interval from 8930' to 9030' as shown on the log of the Washita Terrel Lease No. 1-1126 and allocation based on deliverability.

**DISCUSSION OF THE EVIDENCE**

The Darrouzett (Morrow, Lower) Field was discovered in 1988 at a depth of 8911'. The discovery well was the Sterling Oil & Gas Meier Lease Well No. 1-1162. This well has cumulative production of 433 MMCF and is producing less than 50 MCFD. Washita completed its Meier Lease Well No. 2-1162 in January, 2005. The Meier No. 2-1162 was perforated from 8898' to 8918' and is producing about 2 MMCFD. Washita has just completed its second well in the field, the Terrel Lease Well No. 1-1126, which is capable of 3 MMCFD.

The lower Morrow is fairly extensive in this area though it pinches out a few miles to the west. It is tight a few miles to the east. This field is on the east side of an up-to-the-east fault with over 200' of throw. There are also smaller east-west faults, one of which separates Wichita's wells from the discovery well. When the Meier No. 2-1162 was completed, it encountered virgin pressure at around 3500 psi, while the reservoir pressure in the discovery well had declined to about 200 psi.

Assuming 11.6% decline which is typical for lower Morrow wells, the Meier No. 2-1162 will eventually produce 6 BCF. Wichita believes this reservoir in this fault block covers 3600 acres. The porosity is 13.5% and water saturation is 30%. Assuming 85% recovery, volumetric calculations show the average recovery from 640 acres would be 6.11 BCF.

The lower Morrow occurs between 8930' and 9030' as shown on the log of the Terrel Lease No. 1-1126. Well spacing of 1320'-2640' will provide extra flexibility for drilling the additional wells necessary to drain this field. The current allocation formula is based on deliverability.

### **FINDINGS OF FACT**

1. Notice of this hearing was mailed to all operators in the Darrouzett (Morrow Lower) Field on July 26, 2006.
2. The Darrouzett (Morrow, Lower) Field was discovered in 1988 at a depth of 8911'.
3. The discovery well has declined to less than 50 MCFD but is probably fault separated from the two wells of Wichita Oil & Gas L.L.C.
4. Wichita Oil & Gas, L.L.C. completed its Meier Lease Well No. 2-1162 in January of 2005 and has recently completed another well in the field.
5. Permanent field rules adopting 640 acre proration units are appropriate.
  - a. The Meier No. 2-1162 is still producing about 2 MMCFD after a year and will eventually produce 6 BCF.
  - b. Assuming 85% recovery, volumetric calculations show the average recovery from 640 acres would be 6.11 BCF.
  - c. Another recently completed well is capable of producing 3 MMCFD.
6. Additional wells will need to be drilled to drain this field and well spacing of 1320'-2640' will facilitate the additional drilling.
7. Allocation based on deliverability is the same as the current allocation formula.
8. A designated interval extending from 8930' to 9030' as shown on the log of the Wichita Oil & Gas L.L.C. Terrel Lease Well No. 1-1126 includes the productive section in the Darrouzett (Morrow Lower) Field.

### **CONCLUSIONS OF LAW**

1. Proper notice was given as required by statute.

2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
3. The requested field rules for the Darrouzett (Morrow Lower) Field will prevent waste, protect correlative rights and promote orderly development of the reservoir.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends approval of the requested permanent field rules for the Darrouzett (Morrow Lower) Field, as per the attached order.

Respectfully submitted,

Margaret Allen  
Technical Hearings Examiner